FEB-1 6 2006

Title: A NOVEL SEROTONIN-GATED ANION CHANNEL

Applicant(s): Rajesh Ranganathan et al. Client/Matter No.: 01997/521003 Filing Date: November 21, 2000 Serial No.: 09/717,743

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TCATGTTTCA CGGAACGACG AATTTATCCC GTCGTTTCTT CCTTTCCGTT TTAACTCATA TCTCTTCCTG GATCCTTCAG AGCTCTTGTC AATTCCTCAC GTTTTTTTTT GTTTTTTCGT CGTTTAATTG TGGAAACACA TATCCGTCCT CTTTGAAACA GCATCAGAAA ACTTTCTGCT CTCCGTGTCC TTCTACTTAC TCTGATTGCC TTAGTTAGTC ACATCGCAAG CAACAACTAA CTGCCAATGG GAGGAGCCAG TTGGAGCAGG GTGCGTGCTC GGTGCTCTTT TCAGAAGGTT TTCTCTTGTG CCAGCATGCT TTTTTGAGGC TGTGTCATCA CAATGAACAT GTGTGAGTTC ATCCGTCTGG ATTATTCTTT TTCTTACGTC TTCTGAGTAC TTCATACTTT CCAAATTTTT CAACTGAACT TTTCTTCTTT TCTCATTGAA GTGGTTTGGT TTTGGTCGCG TGATCAACGG ATCCTACTTT TTTGAAACAA AATGTTTTTG AAGTTTCACA GACTGATTTC GGGGTTTTTT CAAAGAATAT ATTCCCTCTC GAGCAAGAGA AAATTCCAGA AAATAGTAGT TTTTTTCAAT TAGTCGTTTC ATTTGTACTA GCTAAAAAAC TTGCAACTTA TGGCTTTAAA ACATGTGTTG GCTTCATACA AAAACATTTA ACTAGTGTTT TTCCAGTTTT GTGTTCGTTT CATTTTCTCA CCAAACTGAC AATAATTACT TTCTGTGAAC GTGTTTTGTA GGCAAGCTCC CGAATATTTT ATCAATTTGA TTGCGATAAT TATTCTATCA GAAATATATT TTCAGAAATC CAAATACTCC AGGTGCCAAT GCGGTGAAAG AAAATTATGA AGTTTATTCC TGAAATCACA CTACTCTTGC TTTTATTTGT ACACTCTACA CAGGTTAGTT GGTTGATTCT AGATCTCTTG CCTCCTAGCT TGCAAGGATA ATATAATTGA ATTGTTTTTG AGGAGTGCAA AGATTGAATA GTTTTCTATA TTTAGGCTAA AGGAAAACGA CGGAAATGTC CGGAGGGTGC GTGGTCGGAA GGAAAGATTA

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		2/23			
	1160 CATGAGCAAC		1180 TGTTGCCCGA		
1210 TTAATATTGA	1220 GATTCATGTA		1240 GACTCTATAA		
1270 GTTTTCTTTA	1280 AAATTAAACT		1300 ACTTTTGAAT	1310 AAGTTTATCA	1320 GATAGAAATT
1330 GTCTGAACTT	1340 TTCGATTCAA		1360 CTTCAAAGCG		1380 ACTCACTTCC
1390 ATTTATCTCT			1420 AAGCCTTTTT		1440 CGTTCTTTT
1450			1480 TCCTTGATGA		1500 CTGAGAATAG
1510	1520	1530		1550	1560
1570	1580	1590	1600	1610	1620
1630	1640	1650	ACACAGAAGA 1660	1670	1680
GACTGCCAAA 1690	AGTCGAAGGG 1700		TTTGTTGCAA		CGAAGTTATG 1740
•			GTGAAGAGAT		
1750 TGAATGCTTC			1780 TATGTTTACA		1800 CAATCTATCC
1810 TAGAAATGTT	1820 TGAACCACCC	1830 TCTAAAGTCC	1840 TTCCGTATAT		
1870 CAGAATTCAA	1880 GAGTTGTTTG		1900 CTCTTTTTG	1910 GAGAATATGT	
			1960 GAAAAAGTGC		1980 AAACTTTTAT
			2020 GATGAAAAG		
			2080 GCATTTTTGG		
2110	2120	2130	2140 TACATATGTA	2150	2160
2170	2180	2190	2200	2210	2220
			AGCTTGAATG		
			2260 GACTCGGCAC		2280 TCATCTTCCG

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		3/23	,		
2290 GCTTGTAAGC				2330 ATATTTAAAT	
				2390 TTGGTCTCCA	
				2450 GGAAAATGTG	
				2510 GAGCATGTCT	
				2570 TCCTAAGTAT	
				2630 TAACTGGGTG	
				2690 GAGTCTAGAA	
				2750 GAAAAAGAGT	
2770 TTTTTAGAAA				2810 TCTAATGGTT	
				2870 AAAATTTGAA	
				2930 ACCTTGCAAT	
2950	2960	2970	2980	2990 TGAATCCTAT	3000
3010	3020	3030	3040	3050 ATTAATGAAG	3060
3070	3080	3090	3100	3110 AACTTTACTC	3120
3130	3140	3150	3160		3180
3190	3200	3210	3220	3230 TTGGGTTTCA	3240
3250	3260	3270	3280	3290 ATCTCTTCTA	3300
3310	3320	3330	3340	3350 ATATGTGAAA	3360
3370	3380	3390	3400		3420
TTTCTTTT	CAAACAAAIA	AAAAAAAGA		IIIGIIICAG	CAMIGGAIGT

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				3470 GTAGAATTGG	
				3530 GGCATAAGAG	
		3570 TTGGGTGTCA		3590 TCAAAAACAA	3600 TATCAGGAAA
3610 TTGAATTTCA	3620 CTATGATTTC			3650 CGGAACGACG	
				3710 CTAGAAGCAA	
				3770 ATGGAAATGG	
		3810 TACTGGAAGG		3830 CTATGATAGC	3840 ATTTATCAAT
3850 TATTAAAGAA	3860 CTCTGGAATT		3880 GTATAAATAA	3890 ATCTCTATTT	3900 CTTGCGACCT
	3920 TAATAGTTAT		3940 GGATCACTTC	3950 ATCGAAACGG	3960 GCCACCATCT
3970	3980	3990	4000	4010 CTCTGACTTT	4020
4030	4040	4050	4060	4070	4080
4090	4100	4110	4120		4140
4150	4160	4170	4180	TCTCACTAAC 4190	4200
GTTCAGCTGC 4210		GGAATCCGAT		TTGAAGAGGT	AACTGTGAAA 4260
				TTTTGTATTT 4310	
CTATCCACTA	TCAATGTCTT	ATCACCTCTA	GATACTGTTT	AGAAGAAAAT	ATTGTTCACA
GTTATGGAAA	TCACATATAC	TTTGTTCTGG	AATTGTATAT	GTATGCTTTG 4430	AAAAAGCACA
TTAGAATACT	ACAAACATTA	GTTTCCATCA	GATTTTTGAT	TTATCAAAAC	CGTTATATTA
GACACTCTTA	AGTTATCATA	TTCTAATTTC	CAAGAATGTT	4490 ATATTTTGAA	GAAGCCGGTG
				4550 GAAATTTTCA	

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4570	4580	4590	4600	4610	4620
CACACACACA	CACACATTCA	CGAAACTTTG	TGTTGTTTAT	GTTACTTATA	TGTTATCTTT
				4670	
TCTGTCTGAT	CATGGTTTTC	GGACTGAAAT	TGTGTTAATC	GGAAGTTATA	TGTGAGCCAC
4600	4700	4710	4720	4720	4740
4690	4/00	4/10	4/20	4730	4740
ATTGATTAAA	CCTGTGAGAG	AIGCCCAIII	GIACICATII	TACGACTGTC	ICAIGICCAA
4750	4760	4770	4780	4790	4800
				TGCGATCAAC	
4810	4820	4830	4840	4850	4860
CCACCATCTG	GATGTCTGGC	CAGATTCCAT	CCGGAAGCAG	TGGACAAATT	CTCCATTGTA
				4910	
GCTTTTCCAT	TGGCATTTAC	AATGTTTAAT	GTTAGTTAAT	CCACAGTTAA	AAATTCCCAT
4930	4940	4950	4960	4970	4980
AATCATAAAT	ATCTCGACTT	TTCAGCTTGT	CTACTGGTGG	CACTATTTGT	CTCAAACTTT
4490	5000	5010	5020	5030	5040
				TCCAATAATT	
CGAICAAAAC	INICAGIGNI	IGMAGIIIMI	CCCITITANT	ICCANIANII	CHCHGIIGCC
5050	5060	5070	5080	5090	5100
GGTATCTACC				CACAGGGTTC	
5110	5120	5130	5140	5150	5160
CGTTCAATCT	TTTTATGGTT	ATTTCTCTTG	AATGTCCATT	TTAATATTTA	TAGAACACTT
				5210	
TTATGTACAT	TGTGTTGGTA	TTCAATTCGA	AAAACAATGA	AATTTATTTC	TAAATAACTG
5230	5240	5250	5260	E270	5280
				ACTTTTCCGT	
C0111C1000	GILLCIALCA	GCACTIACIA	GCIGACAAAA	ACTITICEGI	ATICGGAATI
5290	5300	5310	5320	5330	5340
AGATTTTTAT				GTATTTATTC	
	5360				
TTATATTGCT	CGCACCCTAA	ATGACAGGTA	TTAGAAATTA	ACCGCTTTTC	AGAGTATTTT
				5450	
TAATCTTCTT	AGTACTAGTT	TAGTTCTTTA	AATAAGAAAC	CATCTAGTTT	TTCATTATCA
5470	5490	. 5490	5500	5510	5520
				AAAAAATTT	
	5540				
ACAAATTATG	TCTTCTCATT	TTTGATCGCT			

Fig. 1 (cont'd)

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ATGAAGTTTA TTCCTGAAAT CACACTACTC TTGCTTTTAT TTGTACACTC TACACAGGCT AAAGGAAAAC GACGGAAATG TCCGGAGGGT GCGTGGTCGG AAGGAAAGAT TATGAACACG ATCATGAGCA ACTACACGAA AATGTTGCCC GACGCGGAGG ACAGCGTACA AGTTAATATT GAGATTCATG TACAGGATAT GGGAAGCTTG AATGAAATAT CATCCGACTT TGAAATTGAC ATTTTATTCA CTCAACTGTG GCATGACTCG GCACTTTCTT TTGCTCATCT TCCGGCTTGT AAGCGAAATA TCACAATGGA AACACGACTT TTACCTAAGA TTTGGTCTCC AAACACGTGT ATGATTAATT CAAAACGAAC AACCGTCCAT GCATCACCAT CGGAAAATGT GATGGTTATT CTGTACGAGA ATGGAACAGT CTGGATTAAC CATCGTCTTA GTGTCAAATC ACCTTGCAAT TTGGATCTGC GACAGTTTCC TTTCGATACT CAAACTTGCA TATTAATCTT TGAATCCTAT AGTCATAACT CAGAAGAAGT TGAACTTCAT TGGATGGAAG AAGCTGTCAC ATTAATGAAG CCAATTCAAC TTCCTGACTT TGATATGGTT CATTATTCAA CTAAAAAGGA AACTTTACTC TATCCAAACG GGTACTGGGA TCAGCTTCAA GTTACTTTCA CTTTCAAACG ACGATATGGA TTCTATATTA TTCAAGCCTA TGTTCCAACA TATCTTACAA TCATTGTATC TTGGGTTTCA TTCTGCATGG AACCAAAAGC TCTGCCGGCA AGAACAACTG TCGGAATCTC ATCTCTTCTA GCTCTTACTT TCCAGTTTGG AAATATTTTG AAAAATCTTC CAAGGGTTTC ATATGTGAAA GCAATGGATG TGTGGATGCT TGGATGCATA TCATTTGTCT TCGGAACCAT

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960 GGTAGAATTG	970 GCATTTGTTT	980 GTTACATTTC	990 CCGTTGTCAG	1000 AACAGCGTAA
1010 GAAACGCGGA		1030 GAACGAATGA		1050 GGTGTGGGCA
1060 AACGGATCGT		1080 AAGCAACGGG		
1110 AATCTCACAT		1130 CAAGCAATGG		1150 AATAATCGAC
1160 ATGATACACC		1180 GGAAGAGGAT		1200 AAACGGGCCA
1210 CCATCTCCAT		1230 AATGACTACA		1250 AGATCCCTCT
1260 GACTTTTGAT		1280 TTTCCATGGA		1300 CCCCTGATTG
1310 AAGAGATGCG		1330 CCACCTCCAC		
1360 TTCCATCCGG		1380 CAAATTCTCC		1400 TTCCATTGGC
1410 ATTTACAATG		1430 TCTACTGGTG		
1460 TCGATCAAAA	1470 CTATCAGTGA			

Fig. 2 (cont'd)

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10 MKFIPEITLL		30 KGKRRKCPEG	40 AWSEGKIMNT	
60 DAEDSVQVNI		80 NEISSDFEID		
	120 LPKIWSPNTC	130 MINSKRTTVH	140 ASPSENVMVI	
160 HRLSVKSPCN		180 QTCILIFESY		
210 PIQLPDFDMV		230 YPNGYWDQLQ		
		280 RTTVGISSLL		
		330 AFVCYISRCQ	340 NSVRNAERRR	
360 NGSCRTRSNG		380 YHPTSNGNGN		400 GRGSLHRNGP
410 PSPLNLQMTT		430 QLPVSMESDR		
		480 FNLVYWWHYL	SQTFDQNYQ	

Fig. 3

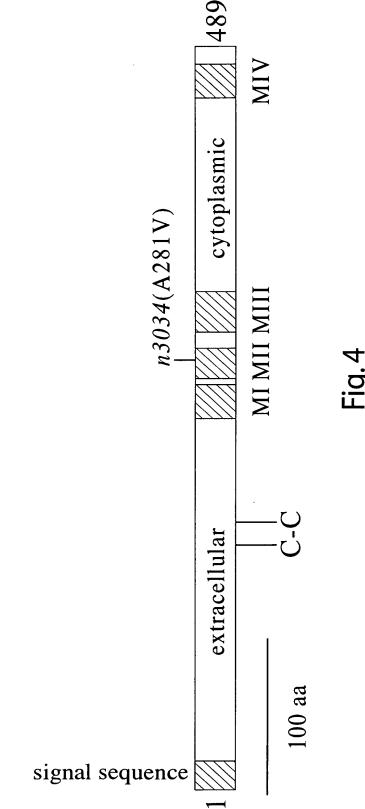
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MOD-1 is similar to ligand-gated ion channels

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Page 10 of 23 Customer No.: 21559 10/23 ok103 is a 4135 bp deletion allele of *mod-1*

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	11/23					
10 TCATGTTTCA	20 CGGAACGACG	30 AATTTATCCC	40 GTCGTTTCTT	50 CCTTTCCGTT	60 TTAACTCATA	
70 TCTCTTCCTG	80 GATCCTTCAG			110 GTTTTTTTT		
	140 TGGAAACACA	150 TATCCGTCCT		170 GCATCAGAAA		
190 CTCCGTGTCC	200 TTCTACTTAC			230 ACATCGCAAG		
250	260 GAGGAGCCAG			290 GGTGCTCTTT		
310		330	340	350	360	
370	380	390	400	410	420	
430	ATTATTCTTT 440	450	460	470	480	
CAACTGAACT	TTTCTTCTTT	TCTCATTGAA	GTGGTTTGGT	TTTGGTCGCG	TGATCAACGG	
490 ATCCTACTTT	500 TTTGAAACAA			530 GACTGATTTC		
550 CAAAGAATAT	560 ATTCCCTCTC			590 AAATAGTAGT		
	620 ATTTGTACTA					
670 GCTTCATACA	680 AAAACATTTA	690 ACTAGTGTTT	700 TTCCAGTTTT	710 GTGTTCGTTT	720 CATTTTCTCA	
730 CCAAACTGAC	740 AATAATTACT			770 GGCAAGCTCC		
790	•	810	820	830	840	
850	860 TTGCGATAAT	870	880	890	900	
910	920	930	940	950	960	
	GCGGTGAAAG					
	980 ACACTCTACA					
	1040 TGTACATTGT		1060 AATTCGAAAA		1080 TTATTTCTAA	
	1100 TTCTGGGGTT			1130 GACAAAAACT		

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1150	1160	1170	1180	1190	1200
CGGAATTAGA	TTTTTATGCA	AGCAATGTTT	CATTTTTACA	CAGTATAGTA	TTTATTCTTA
1210	1220	1230	1240	1250	1260
CTTTTGATTA	TATTGCTCGC	ACCCTAAATG	ACAGGTATTA	GAAATTAACC	GCTTTTCAGA
1270	1280	1290	1300	1310	1320
GTATTTTAA				AAGAAACCAT	
1330	1340	1350	1360	1370	1380
ATTATCACTC	AACTTCAGTC	GGACAAATTT	TAAATTTTTT	ACTCGATAAA	${\tt AAAATTTTAT}$
1390	1400	1410			
		TCTCATTTTT	GATCGCT		

Fig. 6 (cont'd)

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		13/23			
10 TCATGTTTCA	20 CGGAACGACG	30 AATTTATCCC	40 GTCGTTTCTT	50 CCTTTCCGTT	60 TTAACTCATA
70 TCTCTTCCTG	80 GATCCTTCAG	90 AGCTCTTGTC	100 AATTCCTCAC	110 GTTTTTTTT	
		150 TATCCGTCCT			
190 CTCCGTGTCC		210 TCTGATTGCC			
250 CTGCCAATGG	260 GAGGAGCCAG	270 TTGGAGCAGG	280 GTGCGTGCTC	290 GGTGCTCTTT	300 TCAGAAGGTT
310 TTCTCTTGTG		330 TTTTTGAGGC			
370 ATCCGTCTGG	380 ATTATTCTTT	390 TTCTTACGTC	400 TTCTGAGTAC	410 TTCATACTTT	420 CCAAATTTTT
		450 TCTCATTGAA			
490 ATCCTACTTT	500 TTTGAAACAA	510 AATGTTTTTG	520 AAGTTTCACA	530 GACTGATTTC	540 GGGGTTTTTT
550 CAAAGAATAT	560 ATTCCCTCTC	570 GAGCAAGAGA		590 AAATAGTAGT	
610 TAGTCGTTTC		630 GCTAAAAAAC			
670 GCTTCATACA		690 ACTAGTGTTT			
730 CCAAACTGAC	740 AATAATTACT	750 TTCTGTGAAC	760 GTGTTTTGTA	770 GGCAAGCTCC	780 CGAATATTTT
		810 TATTTTCTCG			
		870 TATTCTATCA			
910 AGGTGCCAAT	920 GCGGTGAAAG	930 AAAATTATGA	940 AGTTTATTCC		960 CTACTCTTGC
		990 CAGGTTAGTT			
		1050 ATTGTTTTTG			
		1110 CGGAAATGTC			

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	14/23					
	1160 CATGAGCAAC					
1210 TTAATATTGA	1220 GATTCATGTA	1230 CAGGTTGGTA				
1270 GTTTTCTTTA	1280 AAATTAAACT	1290 GCTGTAAATG			1320 GATAGAAATT	
1330	1340 TTCGATTCAA	1350	1360	1370	1380	
1390	1400	1410	1420	1430	1440	
	TTGCTACAAT	TTCTCCCACA				
TATGTCGTTG	TTCTTACAAA	CAATTTCGTC	TCCTTGATGA	ACTGCTTGAA	CTGAGAATAG	
1510 TCACATGAGG	1520 ATAAATTTGA	1530 TGGAATGACA	1540 AGTTTTGTGC	1550 CCAGAAGGCA	1560 GTTTTGCACT	
1570 GAACTTGTTC	1580 AGTTGCAGAC		1600 ACACAGAAGA		1620 ACTAGTGAGA	
	1640 AGTCGAAGGG					
	1700 TTGGATTGGG					
	1760 GGTCAAAGAT					
1810	1820	1830	1840	1850	1860	
1870		1890	1900	1910	1920	
	GAGTTGTTTG 1940					
	AATTTATATA					
	2000 GCACTTTGGA					
	2060 CCCTGGGTGG					
	2120 AGAAAATTGG					
	2180 TTTATTTTCA	2190 GGATATGGGA			2220 CGACTTTGAA	
+-	2240 TATTCACTCA	2250 ACTGTGGCAT				

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13/23							
2290 GCTTGTAAGC				2330 ATATTTAAAT			
2350 TCAGAAATAT		2370 ACACGACTTT		2390 TTGGTCTCCA	2400 AACACGTGTA		
2410 TGATTAATTC		2430 ACCGTCCATG		2450 GGAAAATGTG			
2470 TGTACGAGGT	2480 ATGATTTTTG		2500 GTCACAAACA	2510 GAGCATGTCT	2520 AAGGGCATGT		
				2570 TCCTAAGTAT			
				2630 TAACTGGGTG			
				2690 GAGTCTAGAA			
2710 TATTCATGTT	2720 TCTCGGTTCA			2750 GAAAAAGAGT			
2770 TTTTTAGAAA				2810 TCTAATGGTT			
2830 AGTATGAAAT				2870 AAAATTTGAA			
				2930 ACCTTGCAAT			
2950 GACAGTTTCC			2980 TATTAATCTT	2990 TGAATCCTAT			
3010 CAGAAGAAGT	3020 TGAACTTCAT			3050 ATTAATGAAG	3060 CCAATTCAAC		
3070 TTCCTGACTT		3090 CATTATTCAA		3110 AACTTTACTC	3120 TATCCAAACG		
				3170 ACGATATGGA			
				3230 TTGGGTTTCA			
3250 AACCAAAAGC	3260 TCTGCCGGCA	3270 AGAACAACTG	3280 TCGGAATCTC	3290 ATCTCTTCTA			
3310 TCCAGTTTGG				3350 ATATGTGAAA	3360 GGTTTGTTTT		
3370 TTTTCTTTTT	3380 CAAACAAATA			3410 TTTGTTTCAG			
Fig. 7 (cont'd)							

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10/23						
3430 GTGGATGCTT				3470 GTAGAATTGG		
				3530 GGCATAAGAG		
				3590 TCAAAAACAA		
	3620 CTATGATTTC			3650 CGGAACGACG	3660 ACGGGAACGA	
				3710 CTAGAAGCAA		
				3770 ATGGAAATGG		
				3830 CTATGATAGC		
				3890 ATCTCTATTT		
3910 ACATTGAACT	3920 TAATAGTTAT			3950 ATCGAAACGG		
				4010 CTCTGACTTT		
				4070 TATCTGATAA		
				4130 TCTCACTAAC		
4150 GTTCAGCTGC	4160 CAGTTTCCAT			4190 TTGAAGAGGT		
				4250 TTTTGTATTT		
	4280 TCAATGTCTT			4310 AGAAGAAAAT	4320 ATTGTTCACA	
				4370 GTATGCTTTG		
				4430 TTATCAAAAC		
				4490 ATATTTTGAA		
	4520 AGATTGAAAA			4550 GAAATTTTCA	4560 CTTCAGCCCA	
		Ľ:	7			

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4570	4580	4590	4600	4610	4620
CACACACACA				GTTACTTATA	
4630	4640	4650	4660	4670	4680
TCTGTCTGAT				GGAAGTTATA	
4690	4700	4710	4720	4730	4740
ATTGATTAAA				TACGACTGTC	
4750	4760	4770	4780	4790	4800
ACACCATGTT	TATTGTAATT	ACCAGGCTAC	TATTTGCAGA	TGCGATCAAC	ATCACCACCT
4810	4820	4830	4840	4850	4860
CCACCATCTG	GATGTCTGGC	CAGATTCCAT	CCGGAAGCAG	TGGACAAATT	CTCCATTGTA
4870	4880	4890	4900	4910	4920
GCTTTTCCAT	TGGCATTTAC	AATGTTTAAT	GTTAGTTAAT	CCACAGTTAA	AAATTCCCAT
4930	4940	4950	4960	4970	4980
AATCATAAAT	ATCTCGACTT	TTCAGCTTGT	CTACTGGTGG	CACTATTTGT	CTCAAACTTT
4990	5000	5010	5020	5030	5040
CGATCAAAAC				TCCAATAATT	CACAGTTGCC
5050	5060	5070	5080	5090	5100
GGTATCTACC	TCCATTCTTT	TCCGATGATT	CGCAGTTTTT	CACAGGGTTC	AAATGTATCT
5110	5120	5130	5140	5150	5160
CGTTCAATCT	TTTTATGGTT	ATTTCTCTTG	AATGTCCATT	TTAATATTTA	TAGAACACTT
5170	5180	5190	5200	5210	5220
TTATGTACAT	TGTGTTGGTA	TTCAATTCGA	AAAACAATGA	AATTTATTTC	TAAATAACTG
5230		5250			5280
CGTTTCTGGG	GTTTCTATCA	GCACTTACTA	GCTGACAAAA	ACTTTTCCGT	ATTCGGAATT
5290	5300	5310	5320	5330	5340
AGATTTTTAT	GCAAGCAATG	TTTCATTTTT	ACACAGTATA	GTATTTATTC	TTACTTTTGA
		5370			5400
TTATATTGCT	CGCACCCTAA	ATGACAGGTA	TTAGAAATTA	ACCGCTTTTC	AGAGTATTTT
				5450	
TAATCTTCTT	AGTACTAGTT	TAGTTCTTTA	AATAAGAAAC	CATCTAGTTT	TTCATTATCA
				5510	
CTCAACTTCA	GTCGGACAAA	TTTTAAATTT	TTTACTCGAT	AAAAAATTT	TATAATTCAG
	5540				
ACAAATTATG	TCTTCTCATT	TTTGATCGCT			

Fig. 7 (cont'd)

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18/23							
60 TACACAGGCT	50 TTGTACACTC	40 TTGCTTTTAT	30 CACACTACTC		10 ATGAAGTTTA		
120 TATGAACACG	110 AAGGAAAGAT			80 GACGGAAATG	70 AAAGGAAAAC		
180 AGTTAATATT			150 AATGTTGCCC		130 ATCATGAGCA		
240 TGAAATTGAC			210 GGGAAGCTTG				
300 TCCGGCTTGT			270 GCATGACTCG		250 ATTTTATTCA		
360 AAACACGTGT					310 AAGCGAAATA		
420 GATGGTTATT							
480 ACCTTGCAAT							
540 TGAATCCTAT			510 TTTCGATACT		490 TTGGATCTGC		
600 ATTAATGAAG							
660 AACTTTACTC							
	710	700	690	680	670		
780	770	760	. 750	740	730		
840 ATCTCTTCTA	830	820	810	800	790		
900 ATATGTGAAA	890	880	870	860	850		
960	950	940	930	920	910		
GGTAGAATTG 1020	1010	1000	990	980	970		
ACGACGACGG 1080	1070	1060	1050	1040	1030		
AAGCAACGGG 1140			GGTGTGGGCA				
AAATGGGAAT					TATGCAAACG		

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1150	1160 ATGATACACC	1170 TCAAGTTACT	1180 GGAAGAGGAT	1190 CACTTCATCG	1200 AAACGGGCCA
			-		
1210	1220	1230	1240	1250	1260
CCATCTCCAT	TAAACCTTCA	AATGACTACA	TTTGATTCGG	AGATCCCTCT	GACTTTTGAT
1270	1280	1290	1300	1310	1320
CAGCTGCCAG	TTTCCATGGA	ATCCGATAGA	CCCCTGATTG	AAGAGATGCG	ATCAACATCA
1330	1340	1350	1360	1370	1380
		TCTGGCCAGA			
1390	1400	1410	1420	1430	1440
ATTGTAGCTT	TTCCATTGGC	ATTTACAATG	TTTAATCTTG	TCTACTGGTG	GCACTATTTG
1450	1460	1470			
TCTCAAACTT					

Fig. 8 (cont'd)

Title: A NOVEL SEROTONIN-GATED ANION CHANNEL Applicant(s): Rajesh Ranganathan et al. Client/Matter No.: 01997/521003 Filing Date: November 21, 2000 Serial No.: 09/717,743 Page 20 of 23 Customer No.: 21559 20/23 The Mod-1 Channel is Activated by Serotonin MOD-1 injected 1 μM 5-HT Fig. 9A 1 mM GABA uninjected 1 μM 5-HT 10 sec Data: Global_mean Model: Hill $CIn^2 = 0.00234$ kmax 1.29923 ±0.03076 ±0.00507 kd 0.03211 1.04613 ±0.13373 n 1E-3 0.01 0.1 10 100 Fig. 9B [5-HT], μM

1.61.4

1.21.0

0.8

0.6

0.4

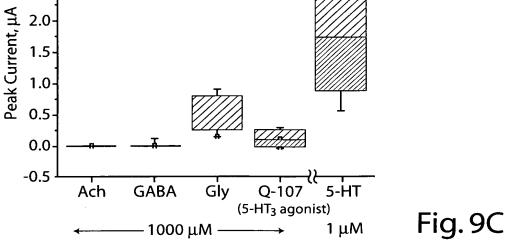
0.2

0.0

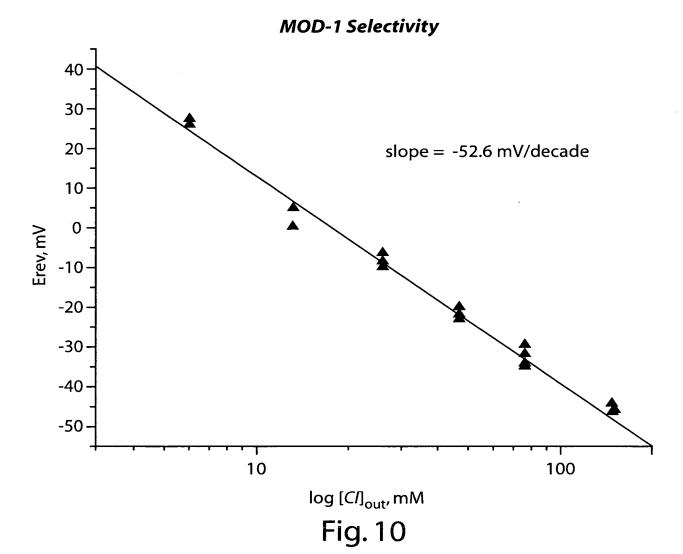
3.0-

2.5

Relative Peak Current



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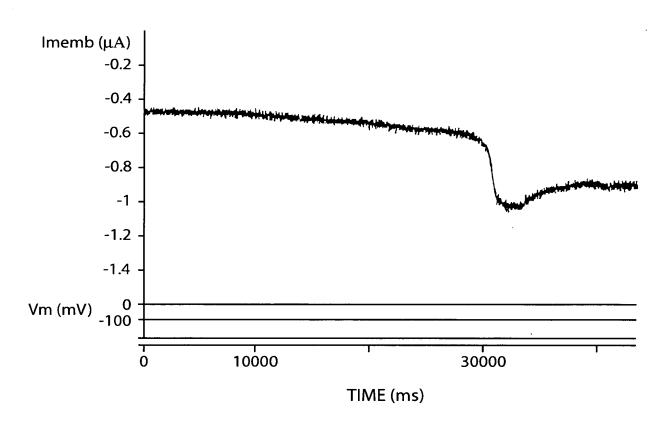


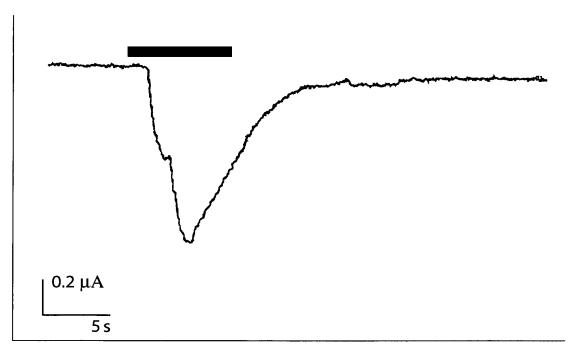
Fig. 11

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Oocyte injected with rat cortex poly(A)+ RNA. Membrane potential -70 mV. 1 μ M 5-HT applied (bar) Oocyte was pretreated with 0.2 mM BAPTA-AM for 2 hours. The bath solution contained 2 mM Co²⁺ to block 5-HT3a responses.